Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) An ablation catheter comprising:

a tubular body associated with an ablation fluid supply lumen;

at least one manifold defining at least one ablation fluid flow path out of the ablation fluid supply lumen, the at least one manifold comprising:

at least one inlet port in fluid communication with the ablation fluid supply lumen and arranged to provide a swirling <u>vortex</u> motion to an ablation fluid flowing into the at least one manifold;

at least one outlet port in fluid communication with the at least one inlet port, the at least one outlet port having a larger dimension than the at least one inlet port; and an electrode positioned in the at least one ablation fluid flow path.

- 2. (Canceled).
- 3. (Previously Presented) The ablation catheter of claim 1 wherein the at least one manifold defines a longitudinal axis, and wherein the at least one inlet port is arranged at an angle with respect to the longitudinal axis of the manifold.
- 4. (Canceled).
- 5. (Previously Presented) The ablation catheter of claim 1 wherein the at least one inlet port defines a circle having a diameter of about 0.002 inches, and wherein the at least one outlet port defines a circle having a diameter of about 0.02 to about 0.025 inches.
- 6. (Previously Presented) The ablation catheter of claim 1 wherein the electrode is housed in an electrode lumen.

Application No: 10/613,795

Response to Office action dated October 3, 2006

Reply and Amendment of February 1, 2007

7. (Previously Presented) The ablation catheter of claim 6 wherein the electrode lumen is in communication with the at least one output port.

- 8. (Previously Presented) The ablation catheter of claim 1 wherein the manifold further comprises at least one channel in fluid communication with the at least one output port.
- 9. (Previously Presented) The ablation catheter of claim 8 wherein the at least one channel is defined in the tubular body of the catheter.
- 10. (Previously Presented) The ablation catheter of claim 1 wherein the catheter further comprises a shaping element, and wherein the manifold is defined in the shaping element.
- 11. (Previously Presented) The ablation catheter of claim 1 wherein: the tubular body includes a distal end region defining at least a partial loop; and the at least one manifold includes a plurality of manifolds along at least a portion of the at least a partial loop; and

the plurality of manifolds are adapted to distribute ablation fluid within the ablation fluid supply lumen to the plurality of manifolds along the at least partial loop.

- 12. (Previously Presented) The ablation catheter of claim 1 wherein the tubular body defines an arcuate section.
- 13. (New) An ablation catheter comprising:

a tubular body associated with an ablation fluid supply lumen;

at least one manifold defining at least one ablation fluid flow path out of the ablation fluid supply lumen, the at least one manifold comprising:

an electrode positioned in the at least one ablation fluid flow path; and means for providing a swirling vortex motion in the at least one ablation fluid flow path.

Application No: 10/613,795

Response to Office action dated October 3, 2006

Reply and Amendment of February 1, 2007

14. (New) The ablation catheter of claim 13 wherein the at least one manifold defines a longitudinal axis.

15. (New) The ablation catheter of claim 13 wherein the electrode is housed in an electrode lumen.

16. (New) The ablation catheter of claim 13 wherein the catheter further comprises a shaping element, and wherein the manifold is defined in the shaping element.

17. (New) The ablation catheter of claim 13 wherein:

the tubular body includes a distal end region defining at least a partial loop; and the at least one manifold includes a plurality of manifolds along at least a portion of the at least a partial loop; and

the plurality of manifolds are adapted to distribute ablation fluid within the ablation fluid supply lumen to the plurality of manifolds along the at least partial loop.

18. (New) The ablation catheter of claim 13 wherein:

the tubular body defines an arcuate section.